

# Research Cruise Report

## Channel Islands National Marine Sanctuary



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Date	12 April 2003

1. VESSEL	CINMS Research Vessel <i>Shearwater</i>	2. PROJECT DATES	8-12 APRIL 2003
3. PROJECT TITLE	Anacapa Island Xantus's Murrelet ( <i>Synthliboramphus hypoleucus</i> ) Surveys		
4. CRUISE LOG	<p>8 April: Depart SB Harbor for Anacapa Island at 3 PM. Arrival at Anacapa at 5 PM. Excellent conditions, we completed all three East Anacapa standard surveys, one complete island survey, and 4 hours of radar surveys.</p> <p>9 April: We conducted afternoon nest monitoring in the caves on the south side of Middle Anacapa and searched new habitats and caves along the shoreline of this area. Excellent nighttime conditions. We completed all three standard surveys, radar surveys and captured murrelets between surveys.</p> <p>10 April: We conducted daytime nest monitoring in the sea caves on West Anacapa and the north side of Middle Anacapa. Good nighttime conditions. We completed the first two standard spotlight surveys and radar surveys.</p> <p>11 April: Excellent nighttime conditions. We completed the first two standard surveys, one island survey, and radar surveys.</p> <p>12 April: After completion of last spotlight survey, we pulled anchor (5:30 AM) and returned to SB Harbor.</p>		
5. AMENDMENTS TO CRUISE PLAN/ COMMENTS	Third week of surveys.		
6. PROJECT RESULTS	<p><b>Methods:</b> Spotlight surveys were conducted from inflatable boats with three person crews (driver, spotlight observer, and data recorder). The driver guided the boat at low speeds along standard transect lines by navigating between way points with a hand-held GPS receiver, while the observer scanned a 180° arc with a spotlight and called off data for each murrelet or group to the data recorder. There are two types of surveys: 1) standard surveys on two transects along the south side of East Anacapa which are conducted at 10 PM, 1 AM and 4 AM, and 2) island surveys which circumnavigate the entire island.</p> <p>Murrelet were captured by three person crews (driver, spotlight operator, and dip net handler) which searched for murrelets within 500 m of shore. We pursued murrelets located in the spotlight beam and captured them with dip nets from the inflatable boat. Murrelets were banded, weighed and examined for presence of a brood patch before being released at the capture location.</p> <p>Radar surveys were conducted from the R/V Shearwater from an anchorage off the south side of Middle Anacapa Island. Murrelet echoes were identified by the size and speed of the radar echo. All murrelet echoes observed within 300 m of the cliffs during the 4-hour survey were recorded</p> <p><b>Results:</b> Murrelet numbers remained generally high during spotlight surveys. We captured and banded 11 murrelets, including the first captured bird with a brood patch. Sea cave monitoring has documented nesting in five sea caves, with no signs of rats or rat depredation.</p>		

The Channel Islands National Marine Sanctuary appreciates that you submit the required interim and/or final report in the form provided above. If the researcher/agency has compiled a final report including all necessary material for another purpose, staple a copy to this form for submittal.